DOCUMENT RESUME

ED 260 155 UD 024 356

TITLE Chapter I Developer/Demonstration Program: Learning to Read through the Arts, 1983-84. Evaluation Section Report.

INSTITUTION New York City Board of Education, Brooklyn, N.Y. Office of Educational Evaluation.

PUB DATE [84]

NOTE 28p.; Prepared by the Instructional Support Evaluation Unit. For related documents, see ED 189 238, ED 215 067, ED 219 719, and ED 236 280.

PUB TYPE Reports - Evaluative/Feasibility (142)

EDRS PRICE MF01/PC02 Plus Postage.

DESCRIPTORS *Achievement Gains; *Art Activities; Bilingual Students; Disadvantaged; Elementary Education; Program Effectiveness; *Reading Achievement; *Reading Attitudes; Reading Improvement; *Reading Programs; Special Education; Student Attitudes

IDENTIFIERS *Learning to Read Through the Arts Program; New York (New York)

ABSTRACT

Learning to Read Through the Arts offers intensive reading instruction to Chapter I eligible students through the integration of a total reading program with a total arts program. In 1983-84, the program was offered to a total of 625 general education students, 140 bilingual students, and 100 special education students (all in grades 2-6). Reading performance of general education students was measured by the reading subtests of the California Achievement Test. The overall mean gain for the fall-to-spring comparison was 13.1 normal curve equivalents (N.C.E.s); the spring-to-spring gain was 6.7 N.C.E.s. Statistically significant gains were found for each grade level except for grade three on the spring-to-spring comparison. Reading performance of the bilingual and special education students was measured by a criterion-referenced test, the Wisconsin Design Skill Development Test. Eighty-one percent of bilingual students and 87 percent of special education students met or exceeded their mastery criterion. Students' writing performance was assessed by a holistically scored writing sample. All groups demonstrated some improvement in writing performance from pretest to posttest. A pretest-posttest improvement in attitudes toward reading was found among general education students. The following recommendations were made for program improvements: (1) there is a need for staff development sessions to address the lower performance of third-grade general education students; and (2) greater emphasis should be placed upon instruction in language expression skills at all grade levels. (RDN)

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CHAPTER I DEVELOPER/DEMONSTRATION PROGRAM: LEARNING TO READ THROUGH THE ARTS, 1983-84

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UD024356

CHAPTER I DEVELOPER/DEMONSTRATION PROGRAM
LEARNING TO READ THROUGH THE ARTS:

EVALUATION SUMMARY, 1983-84

The Chapter I Developer/Demonstration Program: Learning to Read Through the Arts (L.T.R.T.A.) offers intensive reading instruction to Chapter 1 eligible students through the integration of a total reading program with a total arts program. The program was offered for a 29-week cycle from October, 1983, to June 1984. Chapter I-eligible general education and bilingual children in grades two through six and their classroom teachers in each borough were bused to a program site in their borough two afternoons a week for four-hour L.T.R.T.A. sessions. Special education students attended L.T.R.T.A. one full day each week. A total of 625 general education students, 140 bilingual students, and 100 special education students participated in the program.

Reading performance of general education students was measured by the reading subtests of the California Achievement Test. A pretest-posttest design was employed to measure fall-to-spring and spring-to-spring improvement. The overall mean gain for the fall-to-spring comparison was 13.1 N.C.E.s; the spring-to-spring gain was 6.7 N.C.E.s. Statistically significant gains were found for each grade level, except for grade three, on the spring-to-spring comparison.

Reading performance of the bilingual and special education students was measured by a criterion-referenced test, the Wisconsin Design Skill Development Test. The criterion for student achievement was mastery of a number of targeted skills (five for bilingual students and three for special education students). Eighty-one percent of bilingual students and 87 percent of special education students met or exceeded their mastery criterion.

Students' writing performance was assessed by a holistically scored writing sample. All groups of students demonstrated some improvement in writing performance from pretest to posttest. General education students' writing was also assessed by the Language Mechanics and Language Expression subtests of the California Achievement Test, statistically significant gains were obtained for each grade level, except for grade three, on the Language Expression subtest.

General education students' attitudes toward reading were measured at the beginning and end of the program by the reading subtest of the Estes Attitude Scales. Results indicated pretest- posttest improvement in attitudes toward reading. This finding must be interpreted with caution, since students' responses to items on the scale are dependent upon their reading skills.

The following recommendations were made for program improvements.

- There is a need for staff development sessions to address the lower performance of third-grade general education students.
- Greater emphasis should be placed upon instruction in language expression skills at all grade levels.

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I. INTRODUCTION

Since its inception in 1971, the Learning to Read Through the Arts (L.T.R.T.A.) program has attempted to utilize artistic activities to stimulate student interest in reading and writing. The program services children in general education classes from grades two through six, a smaller number of bilingual students in these grades, as well as special education students (who make up approximately one-eighth of the participants in the program). The Office of Educational Assessment has conducted yearly evaluations of the program.

This report reviews the program and it goals (Chapter I), describes evaluation methods (Chapter II), discusses findings concerning students reading and writing performance and attitudes toward reading (Chapter III), and offers recommendations for program improvement (Chapter IV).

The program has operated since 1971 and has received recognition on the national, state, and local levels as an exemplary program. In 1983-84 the program operated in five sites, one in each borough, and served 865 students. The program ran for a 29-week cycle from October, 1983, to June, 1984. Participating general education and bilingual students were bused to the program site in their borough two afternoons a week for four-hour L.T.R.T.A. sessions.

Special education students attended L.T.R.T.A. one full day each week instead of the two half-days that regular students attended. Both special education and bilingual students were taught the same curriculum as general education students, but at a slower pace, and thus did not necessarily cover the same amount of material. In all, 100 special education and 140 bilingual students participated in the program, in addition to the 625 general education students.

The Manhattan, Bronx, and Brooklyn sites each had two reading teachers, three art teachers, and one office aide. The Queens and Staten Island sites each had two reading teachers, two art teachers, and one office aide. The main office, housed at the Manhattan site, was staffed by the director, four teacher trainers, five secretaries, and one student aide.

At each site students participated in two reading workshops and two reading-oriented arts workshops during each session. Each site offered workshops in at least three of the following art activities: dance, print-making, photography, painting, puppetry, mixed media, theatre, music, and jewelry. On a typical day, groups of about 15 students would spend the afternoon rotating among the various reading and art workshops, reinforcing their learning experiences. For example, after a session in the painting workshop in which they had been making murals of sea scenes, students might go to a reading workshop in which they would tell stories using marine vocabulary and discuss the tools and materials they had used in the previous session's artistic work. At the end of each day, students recorded their experiences in individual writing journals. Keeping journals provided an additional writing exercise and enabled students to make their experiences intelligible to themselves in their own words. In addition, the workshop leader recorded the day's activities in a master-journal.

Ninety-minute parent workshops were held at each site once each month. The workshops, conducted by an assistant coordinator, focused on family-life education and how children learn. Parents participated in hands-on art and reading activities, and were invited to observe their children's workshops in order to learn about the program. Workshop leaders offered suggestions on how parents could help their children with reading at home.

Successful implementation of the program was to be demonstrated by achievement of the following six student outcome objectives.

1. General education L.T.R.T.A. students will make mean normal curve equivalent (N.C.E.) gains in Total Reading from pretest to posttest on the California Achievement Test (CAT), administered in October, 1983, and April, 1984 (fall-to-spring).

2. General education L.T.R.T.A. students will make mean N.C.E. gains in Total Reading from pretest to posttest on the CAT, administered citywide in April, 1983, and April, 1984 (spring-to-spring).

3. Sixty percent of all special education students will master at least three reading skills on the posttest of the Wisconsin Design Skills Development Test that they had not mastered on the pretest. Sixty percent of all bilingual students will master at least five skills that they had previously failed to master.

4. General education L.T.R.T.A. students will make N.C.E. gains on the Language Mechanics and Language Expression subtests of the CAT, administered in October, 1983, and May, 1984.

5. Average scores on holistically scored writing samples of students will increase from pretest to posttest.

6. Average scores of general education students on the reading subtest of the Estes Attitude Scale will increase from pretest to posttest.

II. EVALUATION METHODOLOGY

All tests were administered by L.T.R.T.A. staff (See Table 1). The raw scores were entered on data retrieval forms (developed by O.E.A.) and later the C.A.T. scores were converted to normal curve equivalents by O.E.A. The data on the retrieval forms was checked by O.E.A., and student records were prepared for submission to the S.E.D.

All tests except the Estes test were scored by L.T.R.T.A. staff. The Estes test papers of 90 students were randomly selected; gain scores were calculated and an item analysis was conducted by O.E.A. The 90 students were randomly selected in order to proportionately represent schools, grades, and genders.

TABLE 1

L.T.R.T.A. Testing Program, 1983-84

Program Area	Test Name	Students	Pretest Date	Posttest Date	Criteria of Success
Reading	CAT, Total Reading Subtest	General Education	1. 4-83* 2. 10-83**	4-84*** 4-84***	NCE gain NCE gain
Reading	Wisc. Design Skills Devel. Test	Special Education	10-83	5-84	3 skills
		Bilingual	10-83	5-84	5 skills
Writing	CAT Lang. Mech. and Lang. Exp. Subtests	General Education	10-83	5-84	NCE gain
Writing	Holistic Scored Writing Sample	General, Special Education, Bilingual	10-83	5-84	Avg. score increase
Attitude Towards Reading	Estes Attitude Scales, Reading Subtest	General Education	11-84	5-84	Avg. score increase

* Form D, Levels correspond to 1982-83 grade levels.
** Form C, Levels correspond to 1983-84 grade levels.
*** Form C, Levels correspond to 1983-84 grade levels.

- A total of 865 students participated in the program, including 625 general education students, 100 special education students and 140 bilingual students.

III. FINDINGS

READING SKILLS

Fall-To-Spring Testing

Table 2 shows the mean pretest and posttest N.C.E. scores for the 527 general education students with complete data on the California Achievement Test administered in October, 1983, and April, 1984. The U.S. Department of Education Evaluation Model A specifies a no-growth expectation in the absence of supplementary educational treatment. Thus, barring any other external factors influencing test outcomes, any change in mean N.C.E. scores upon retesting may be attributed to the treatment. The mean pretest-posttest gain for the total group was 13.1 N.C.E.s. This gain reflects a substantial amount of improvement in reading achievement by students participating in the L.T.R.T.A. Program. The greatest gain was achieved by fifth-graders who rose 22.3 N.C.E.'s on the average. The smallest gain was made by sixth-graders, whose mean gain was 7.6 N.C.E.'s (See Table 2).

Spring-To-Spring Testing

The California Achievement Test was administered as the New York City Reading Test in spring, 1983, and spring, 1984. The overall mean scores increased (See Table 3). The overall mean gain was 6.7 N.C.E.s, with the greatest gain again shown by the fifth-graders. There was significant improvement at all grades other than third grade. The N.C.E. scores of third graders actually fell from pretest to posttest by 3.2 N.C.E.'s.

TABLE 2

Learning to Read Through the Arts Program, 1983-84[a]

General Education Students' Fall-to-Spring Mean N.C.E. Scores on the California Achievement Test

Grade	Number of Students	Mean Pretest N.C.E.	S.D.	Mean Posttest N.C.E.	S.D.	Mean Gain[b]	S.D.
Two	74	36.9	15.4	51.1	13.9	14.2	14.2
Three	45	18.5	11.4	29.6	9.1	11.1	12.1
Four	264	28.3	13.0	40.9	12.9	12.6	13.7
Five	64	30.4	12.9	52.7	12.9	22.3	16.5
Six	80	35.5	9.9	43.1	13.1	7.6	10.5
TOTAL	527	30.0	13.7	43.1	14.2	13.1	14.1

[a] Pre- and posttests were administered on October, 1983, and April, 1984, respectively.

[b] All t-tests were significant at the .001 level.

- Mean gains for all grades exceeded seven N.C.E. points, the expected criterion for national exemplary projects.
- The mean gain across grades was greater than in subsequent years.

1983-84 (N=527)	13.1 N.C.E.s
1982-83 (N=677)	12.0 N.C.E.s
1981-82 (N=840)	12.0 N.C.E.s
1980-81 (N=1,130)	13.0 N.C.E.s

TABLE 3

Learning to Read Through the Arts Program, 1983-84[a]

General Education Students' Spring-to-Spring Mean N.C.E. Scores on the California Achievement Test

Grade[b]	Number of Students	Mean Pretest N.C.E.	S.D.	Mean Posttest N.C.E.	S.D.	Mean Gain	S.D.
Three	43	33.4	9.3	30.2	8.0	-3.2	11.2
Four	245	34.3	12.5	41.7	12.5	7.4***	12.0
Five	61	38.6	9.1	52.8	13.0	14.2***	12.0
Six	69	40.0	12.8	43.7	10.8	3.7***	7.7
TOTAL	418	35.8	12.0	42.5	13.1	6.7***	12.1

[a] Pre- and postests were administered on October, 1983, and April, 1984, respectively.

[b] Second graders were not tested in spring, 1983. Therefore, their scores are not presented in this table.

***t-tests were significant at the .001 level.

- Mean gain in N.C.E. scores across all grades, 6.7 N.C.E.s, approached seven N.C.E. points, the expected criterion for national exemplary projects.

A possible explanation of the decrease third graders' CAT scores can be derived from consideration of attendance records. The median number of days absent for students in all grades was five. The mean number of days absent for each grade was as follows: grade 3 = 15.57 days; grade 4 = 10.28 days; grade 5 = 7.30 days; grade 6 = 17.59 days. The grade with the fewest absences, grade five, obtained the highest scores. But the grade with the greatest number of absences did not obtain the lowest scores; third graders, whose mean number of absences was almost as high, obtained the lowest scores. Close examination of attendance records reveals that two third grade classes in the same borough had a very high number of absences --20.54 and 20.28 days. It may well be that a large number of absences has an adverse effect on test performance, and that, furthermore, regular attendance is more crucial for third graders than for sixth graders.

Fall-to-spring and spring-to-spring test result comparisons yield different information about student achievement. Spring-to-spring comparisons span the summer months during which no growth, or a decreased rate of growth, may occur. Additionally, students are administered different test levels in spring-to-spring comparisons. Fall-to-spring comparisons measure only the period during which the student is receivig direct instruction; the same test level is administered at the fall and spring testing periods.

Wisconsin Design Criterion-Referenced Test

All bilingual students were assigned five target skills, and special education students were assigned three target skills, on the Wisconsin Design Skills Development Test to master by the end of the program. The

TABLE 4

Learning to Read Through the Arts Program, 1983-84

Mean Number of Criterion-Referenced Test Skills Mastered by Bilingual Students on the Wisconsin Design Skills Program

Grade	Number of Students	Skills Targeted	Mean Skills Mastered	S.D.
2	37	5	5.2	1.6
3	28	5	5.3	1.0
4	1	5	6.0	0.0
5	40	5	5.3	1.4
6	17	5	5.4	2.2
TOTAL	123	5	5.3[a]	1.5

[a] 80.6% of all bilingual students mastered at least 5 skills

° The student mastery criterion was reached or exceeded at each grade level.

criterion for program success was whether sixty percent of the students in these groups mastered at least the targeted number of skills.

Eighty-one percent of all of the bilingual students mastered at least five skills. This percentage is well above the sixty percent criterion. The mean number of skills mastered exceeded five skills at each grade level (See Table 4). Nineteen percent of the bilingual students failed to master five target skills. However, more than half of these mastered three or four skills.

Special education students (N=100) mastered a mean number of four skills (standard deviation = 1.4), with six students mastering seven skills. The vast majority of the special education students, 87 percent, achieved or exceeded the mastery criterion of three skills.

WRITING ACHIEVEMENT

Regular Students

Improvement in writing achievement was gauged by examining students' scores on holistically scored writing samples. The writing samples were evaluated for organization of ideas, use of support materials, sentence variety, vividness of language, and general mechanics. (A grading metric is included as Appendix A.) These writing samples were given scores of zero to four by two raters, which were then added together, giving each student a score between zero and eight.

The small range of the scoring scale and resulting low numerical values of the scores should not obscure the consistent writing improvement of general education students (See Table 5). Second graders rose an average of 1.4 points, from a mean pretest score of 1.9 to a mean posttest score of 3.3. This is a gain of 17 percent. The largest gain was among

TABLE 5

Learning to Read Through the Arts Program, 1983-84

Mean Holistic Writing Scores of
General Education Students

Grade	Number of Students	Mean Pretest Score	S.D.	Mean Posttest Score	S.D.	Difference	S.D.
2	71	1.7	0.6	3.1	1.3	1.4***	1.4
3	21	2.1	0.2	2.5	0.8	0.4*	0.8
4	245	2.0	0.9	3.1	1.5	1.1***	1.3**
5	58	2.4	0.8	3.9	1.4	1.5***	1.3**
6	53	2.9	0.9	4.2	1.5	1.3***	1.2
TOTAL	448	2.1	0.9	3.3	1.5	1.2***	1.3

* $P \leq .05$
*** $P \leq .001$

- Student improvement in writing was statistically significant for all grades.
- Standardized test results corroborate these results and the pattern of gains.

TABLE 6

Learning to Read Through the Arts Program, 1983-84[a]

Regular Students' Mean N.C.E. Scores on the California Achievement Test

Grade	Number of Students	Mean Pretest N.C.E.	S.D.	Mean Posttest N.C.E.	S.D.	Mean Difference	S.D.
2	72	42.1	20.2	48.8	13.7	6.7**	18.0
3	57	24.6	15.5	26.8	12.4	2.2	19.5
4	231	29.5	13.4	38.0	13.7	8.5***	13.6
5	59	34.4	9.6	45.5	13.5	11.1***	13.4
6	74	30.7	12.1	39.0	14.4	8.3***	13.6
TOTAL	493	31.5	15.1	39.3	14.9	7.8**	15.2

[a] Tests were administered in October, 1983, and April, 1984.
** $p \leq .01$
*** $p \leq .001$

- There was significant improvement in Language Expression achievement for all grades except grade three.

TABLE 7

Learning to Read Through the Arts Program, 1983-84[a]

Regular Students' Mean N.C.E. Gains on the California Achievement Test, Language Mechanics Subtest

Grade	Number of Students	Mean Pretest N.C.E.	S.D.	Mean Posttest N.C.E.	S.D.	Mean Difference[b]	S.D.
2	72	39.8	20.4	61.0	16.1	21.2	16.6
3	57	21.0	12.7	32.6	13.3	11.6	17.0
4	233	32.2	16.5	43.7	17.7	11.5	17.4
5	61	36.1	14.0	46.6	13.8	10.5	17.6
6	74	32.0	13.0	40.8	11.0	8.8	13.6
TOTAL	497	32.4	16.7	44.8	17.4	12.4	17.1

[a] Tests were administered in October, 1983 and April, 1984.

[b] All t-tests were significant at the .001 level.

- There was significant improvement in Language Mechanics achievement for all grades.
- Improvement was greater on the Language Mechanics subtest than on the Language Expression subtest.
- Results on the Holistic Writing test, the C.A.T. Language Expression Subtest, and the C.A.T. Language Mechanics Subtest corroborate each other, all indicating improvement.

fifth-graders, whose scores rose 1.5 points. The smallest gain was among third-graders, whose scores rose 0.4 points. Though small, this rise is still equivalent to roughly 5 percentage points. The overall mean gain was 1.2 points, from a mean pretest score of 2.3 to a mean posttest score of 3.5.

Standardized test results corroborate these findings (See Tables 6 and 7). On the C.A.T. Language Expression subtest*, as on the holistic test, fifth-graders showed the greatest pretest-posttest improvement and third-graders the smallest. Fifth-graders' scores rose 11.1 N.C.E. points, on the average, from 34.4 to 45.5 N.C.E.s. Third-graders' scores rose 2.2 N.C.E. points, from 24.6 to 26.8 N.C.E.s. Improvement was greater on the Language Mechanics subtest than on the Language Expression subtest. Here, second-graders rose 21.2 N.C.E. points to a mean posttest score of 61.0 N.C.E.s. All other grade levels improved by more than 10 N.C.E. points, except sixth-graders, whose scores rose an average of 8.8 N.C.E.'s. These standardized test scores corroborate the holistic writing results. Consistent and substantial gains on the C.A.T. reading and writing tests and the holistic writing tests suggests that students' reading and writing skills improve through participation in Learning to Read Through the Arts.

Bilingual and Special Education Students

Bilingual and special education students were also administered the holistically scored writing test. Bilingual students showed an overall mean gain of 0.7 points (See Table 8). Bilingual students at each grade took the test; the within-grade analyses were all statistically significant

*The Language Expression and Language Mechanics subtests of the C.A.T. were not given as part of the Citywide Reading Test in April. These subtests were administered by L.T.R.T.A. staff in October, 1983, and in May, 1984.

TABLE 8

Learning to Read Through the Arts Program, 1983-84

Mean Gains of Bilingual Students on Holistically Scored Writing Test

Grade	Number of Students	Mean Pretest Score	S.D.	Mean Posttest Score	S.D.	Mean Gain	S.D.
2	28	0.1	0.4	1.7	0.9	1.6**	1.0
3	22	0.9	1.0	2.2	0.8	1.3**	1.1
4	1	2.0	0.0	4.0	0.0	2.0	0.0
5	36	1.9	1.2	2.6	1.3	0.8**	1.1
6	14	1.7	1.5	3.1	1.3	1.4**	1.2
TOTAL	101	1.1	1.3	2.4	1.2	1.2**	1.2

**t-tests were significant at the .01 level.

- Significant results were found at all grade levels except grade four (only one student).

TABLE 9

Learning to Read Through the Arts Program, 1983-84

Mean Gains of Special Education Students on Holistically Scored Writing Test

Number of Students	Mean Pretest Score	S.D.	Mean Posttest Score	S.D.	Mean Gain	S.D.
81	1.8	1.0	3.2	1.1	1.6	0.9

statistically significant with the exception of the fourth grade (N=1). The program had an effect on the writing ability of bilingual students, as well as on their reading skills.

The 66 special education students who took the writing test demonstrated improvement in their performance on the test, rising from a mean 2.2 points on the pretest to 3.5 points on the posttest (Table 9). Special education students had a mean improvement of 1.3 points -- slightly larger than the regular students' mean gain and larger than the bilingual students' mean gain. The consistent improvement on the criterion-referenced reading test and the holistic writing test indicates that the L.T.R.T.A. program was effective in improving the special education students' reading and writing achievement.

ATTITUDE TOWARDS READING

In order to gauge students' attitudes towards reading, The Estes Attitude Scale - Reading Subtest (Appendix B) was administered to students at the beginning and end of the program. This attitude scale is for a series of 14 statements about reading to which students respond: "agree", "disagree", or "not sure". Values of zero to two are assigned to each answer (total score range = 0 to 28), with more positive responses towards reading receiving higher scores.

The scores of 90 randomly selected students were analyzed. Fifty-eight students had complete scores (i.e., answered each of the 14 items on the pretest and on the posttest). The remainder of students did not answer all questions on the test and their scores could not be used. The mean pre-

test score was 18.5 and the mean posttest score was 21.7, a statistically significant improvement of 3.2 points. On the pretest, only seven students had scores of 24 or greater, but twenty-four students had a score of 24 or higher on the posttest.

Interestingly, of the seven questions on which the greatest number of students responded more favorably between the pretest and posttest (Items 2, 4, 5, 6, 7, 11, and 14), five are worded negatively, as in: "Books are boring". Since a favorable response to a negative statement is "disagree", not "agree", some students may have been confused about how to respond to these items on the pretest. On the posttest, however, they used their new reading skills to answer more accurately. For example, a student who actually liked reading might respond "agree" to a pretest item like "Reading is something I can do without", when he actually disagreed. Once the student's reading ability had improved, he could understand the question better and respond "disagree" to indicate that he had a positive attitude toward reading.

IV. CONCLUSIONS AND RECOMMENDATION

According to the test results, L.T.R.T.A. is an effective program. General education students showed substantial gains in reading skills as measured by fall-to-spring and spring-to-spring achievement test score comparisons. They also made gains in writing achievement, as measured by a holistically scored writing test. Improvement on standardized Language Expression and Mechanics subtests indicates that writing improvement is greater than would have been achieved without treatment. Both bilingual and special education students participating in the program improved in reading and writing skills, as indicated by more than the expected 60 percent of students who reached or exceeded the mastery criterion of reading skills on a criterion-referenced test, and overall gains in writing skills.

In order to enhance the L.T.R.T.A. program, the following recommendations are suggested.

1. Third-grader general education students' performance was much below all the other grades. Staff development sessions should address this situation.

2. This was the first year writing was measured as a criterion of program success. The writing sample and standardized writing test should be continued as part of the L.T.R.T.A. testing battery, since they seem to be valid and useful indicators of student growth in writing skills.

3. General education students' performance on the Language Mechanics subtest of the C.A.T. was higher than performance on the Language Expression subtest; this suggests the need for greater emphasis on language expression skills.

CRITERIA FOR RATING STUDENT RESPONSES*

LEVEL 4	LEVEL 3	LEVEL 2	LEVEL 1
Develops the assigned topic in an interesting and imaginative way.			
Demonstrates a logical plan of organization and coherence in the development of ideas.	Develops the assigned topic using an acceptable plan of organization.	Attempts to develop the assigned topic but demonstrates weakness in organization and may include digressions.	Minimally addresses the assigned topic but lacks a plan of organization.
Develops ideas fully through the use of support material (examples, reasons, details, explanations, etc.) that is relevant and appropriate.	Demonstrates satisfactory development of ideas through the use of adequate support material.	Demonstrates weakness in the development of ideas with little use of support material.	Does not use support material in the development of ideas or uses irrelevant mateiral.
Shows skillful use of sentence variety.	Uses some sentence variety.	Demonstrates sentence sense but has little sentence variety.	Demonstrates a lack of sentence sense.
Uses specific, vivid language.	Uses appropriate language.	Occasionally uses inappropriate or incorrect language.	Frequently uses inappropriate or incorrect language.
Makes few or no mechanical erros.	Makes mechanical errors which do not interfere with communication.	Makes mechanical errors which interfere with communication.	Makes mechanical errors which seriously interfere with communication.

ZERO PAPER: Is totally unrelated to the topic; or
Is illegible, i.e., includes so many indecipherable words that no sense can be made of the response; or
Is incoherent, i.e., words are legible but syntax is so garbled that no sense can be made of the response; or
Is a blank paper.

*Minor revisions have been made in these criteria since they were first published in the Writing Test for New York State Elementary Schools, Rater Training Packet, Fall 1982.

APPENDIX A

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Reading Attitude Scale

	A Agree	? Don't Know	D Disagree
15. Reading is fun for me.	A	?	D
16. Books are boring.	A	?	D
17. Reading is a good way to spend spare time.	A	?	D
18. Reading turns me on.	A	?	D
19. Books do not make good presents.	A	?	D
20. Reading is rewarding to me.	A	?	D
21. Reading becomes boring after about a half hour.	A	?	D
22. Free reading teaches me something.	A	?	D
23. There should be time for free reading during the school day.	A	?	D
24. There are many books I hope to read.	A	?	D
25. Reading is something I can do without.	A	?	D
26. A certain amount of time during summer should be set aside for reading.	A	?	D
27. Books usually are good enough to finish.	A	?	D
28. Reading is not exciting.	A	?	D

STEP 1 STEP 2 = STEP 3

Ⓡ Reading Ⓡ